

Revised Report of Results: MVA5394

**Analysis of Settled Dust
714 P Street-OB8**

Prepared for:

**State of California
Dept of General Services
Seismic & Special Programs
707 West 3rd St.
West Sacramento, CA 95605**

Respectfully Submitted by:

Tim B Vander Wood

**Tim B. Vander Wood, Ph.D.
Executive Director**

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Supercedes Report Dated 29 August 2007

10 October 2007



Revised Report of Results: MVA5394

Analysis of Settled Dust - 714 P Street-OB8

Introduction

On 20 July 2007, we received five settled dust samples and a blank from Clark Sief Clark, reportedly collected from 741 P Street #OB8, Sacramento, California. The Chain of Custody was incorrect. The address that the samples were collected from was 714 P Street, #OB8, Sacramento, California. We were asked to determine the asbestos levels in the dust and possible sources for the asbestos. Upon receipt, the samples were assigned MVA Scientific Consultants laboratory identification numbers as follows:

<u>Sample ID</u>	<u>Sample Description</u>	<u>MVA Number</u>
16VA	5 th floor-overhang, soffit area north	S0847
17VA	5 th floor-overhang, soffit area west	S0848
18VA	6 th floor-overhang, soffit area west	S0849
19VA	6 th floor-overhang, soffit area south	S0850
20VA	Basement-Mechanical Room-floor	S0851
21Blank	Blank	S0852

All analyses were carried out in our laboratory during the period 20 July through 29 August 2007.

Methods

The samples were analyzed according to ASTM Method D5755-03 using either a Philips model EM420 or a Philips model CM120 transmission electron microscope (TEM), equipped with an Oxford INCA energy dispersive x-ray spectrometer (EDS). Additional analyses for dust constituents that may serve as source indicators were also conducted by TEM/EDS.

Results and Discussion

The results of analysis for these samples are presented in Table 1. The Appendix contains a summary of the analytical results, the laboratory count sheets, and images and EDS spectra of typical asbestos fibers found in these samples. Also contained in the appendix are images and spectra showing vermiculite associated with chrysotile fibers and other asbestos amphibole minerals typical of those known as "Libby amphibole" and observed as contaminants in vermiculite from the Libby, Montana vermiculite mine operated by W.R. Grace.



Conclusions

Dust analyzed in this study contains elevated levels of chrysotile asbestos. Portions of the dust are consistent with derivation from a chrysotile/vermiculite bearing fireproofing. Asbestiform amphibole consistent with "Libby amphibole" was also found, indicating that the vermiculite in this dust originated at least in part at W.R. Grace's Libby vermiculite mine.

Table 1. Asbestos Concentration in Settled Dust Samples

Sample ID	MVA Number	Asbestos Str/cm ²
16VA	S0847	150,720,000
17VA	S0848	247,711,111
18VA	S0849	191,888,889
19VA	S0850	275,622,222
20VA	S0851	443,088,889
21VA	S0852	None Detected





Chain of Custody-
TEM Micro-Vacuum

תְּלִימָדָה בְּבֵית־יְהוָה • שְׁמַעַנְדָּרָה בְּבֵית־יְהוָה

Chain of Custody-
TEM Micro-Vacuum

Requested TAT (Circle One)	Same Day	One Day (24hr)	Normal (48hr)
Analysis Type (Circle One)	Air	Surface	Bulk Water

CSC Project #	Claim #	Sampling By	# of Samples	Date(s) Taken	Page #	Total Pages
1014265		CAS	6	7.18.07	1	1
Project Name & Location:				Client Information:		
W.R. Grace	DGS					
741 P Street	Chem Connor					
Sacramento, CA						

APPENDIX



ASTM D5755 Results

MVA 5394

By: W.Hill

Client project number:

Str/cm = No Str. X CFA X Total Vol.

Grid Op. X GO Area X Vol Filt X Area Sampled

MVA #: S0847 **Client #:** 16.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
54	1256	5	0.009	0.01	100	100

Anal. Sens = 2791111.111 **Str/CM2 LOD =3*** **Anal. Sens =** 8373333.333

Total = 150720000.000 **Str/CM2**

MVA #: S0848 **Client #:** 17.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
71	1256	4	0.009	0.01	100	100

Anal. Sens = 3488888.889 **Str/CM2 LOD =3*** **Anal. Sens =** 10466666.667

Total = 247711111.111 **Str/CM2**

MVA #: S0849 **Client #:** 18.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
55	1256	4	0.009	0.01	100	100

Anal. Sens = 3488888.889 **Str/CM2 LOD =3*** **Anal. Sens =** 10466666.667

Total = 191888888.889 **Str/CM2**

MVA #: S0850 **Client #:** 19.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
79	1256	4	0.009	0.01	100	100

Anal. Sens = 3488888.889 **Str/CM2 LOD =3*** **Anal. Sens =** 10466666.667

Total = 275622222.222 **Str/CM2**

MVA #: S0851 **Client #:** 20.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
127	1256	4	0.009	0.01	100	100

Anal. Sens = 3488888.889 **Str/CM2 LOD =3*** **Anal. Sens =** 10466666.667

Total = 443088888.889 **Str/CM2**



MVA #:

S0852

Client #:

21.VA

Str. #	CFA	#GO	Area GO	Vol Filt ml	Total Vol.	Area Samp.
0	1256	10	0.009	10	100	0

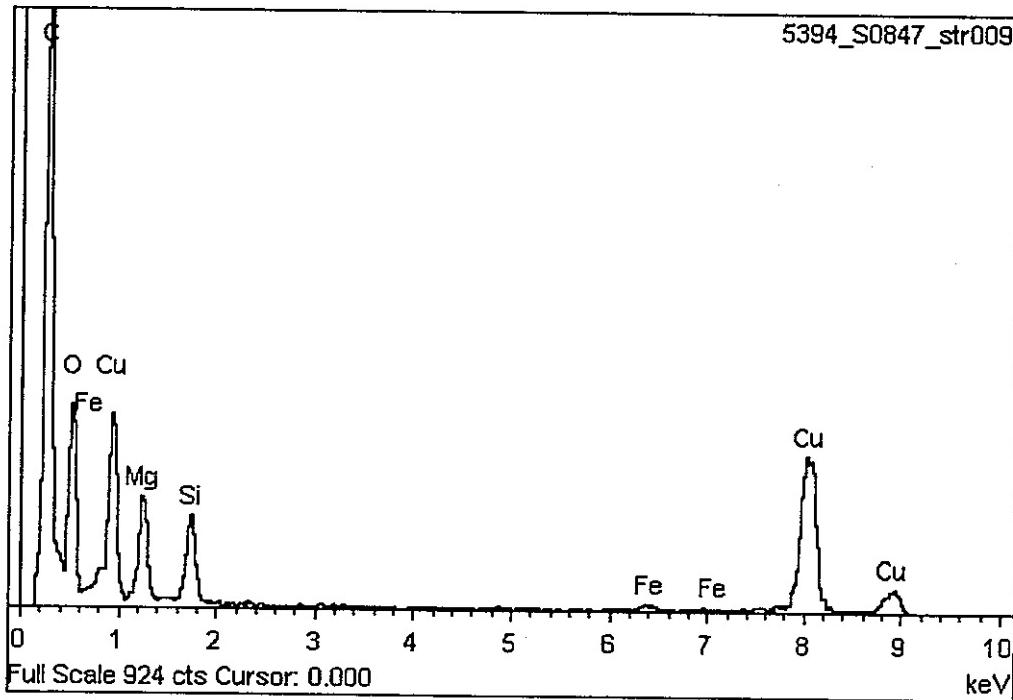
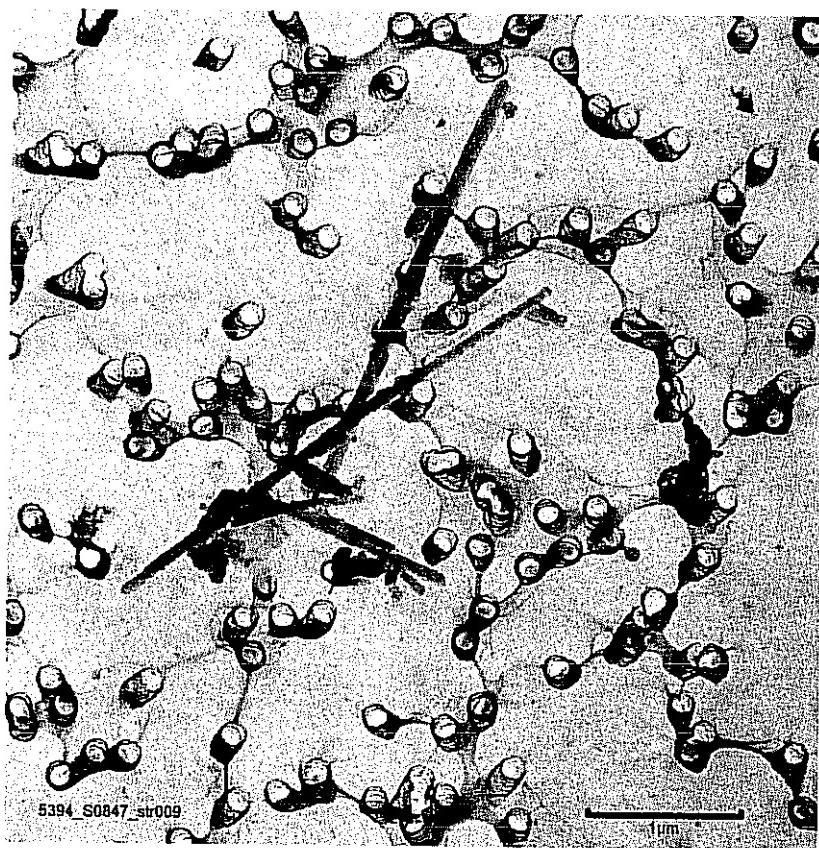
Anal. Sens = 1395.566** Str/CM2 LOD =3* Anal. Sens = 4186.667**

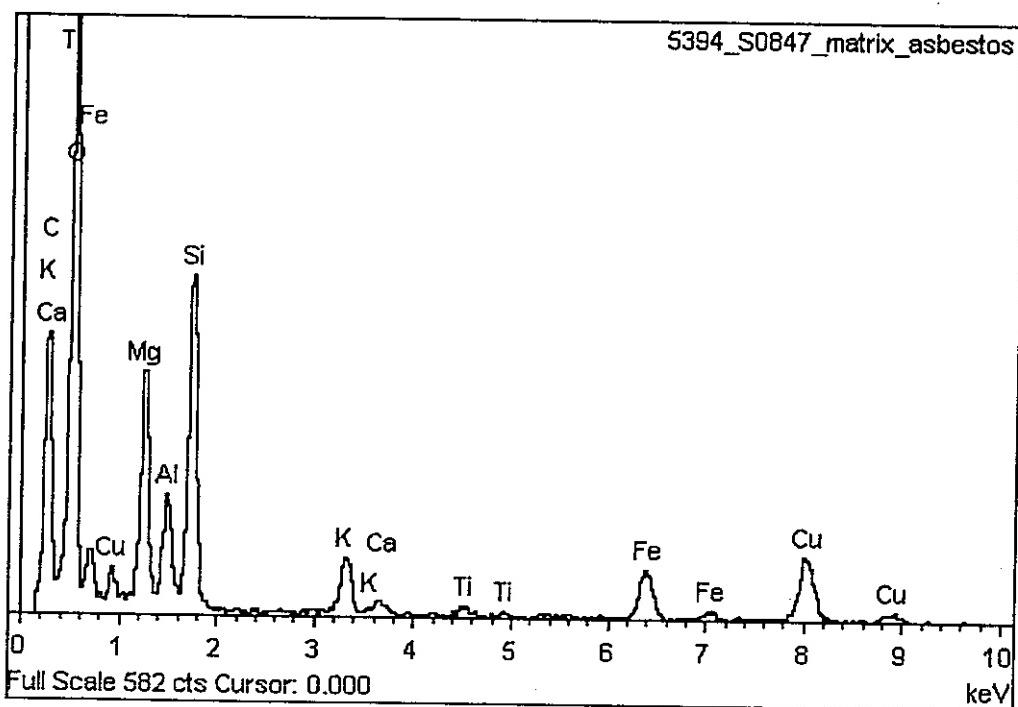
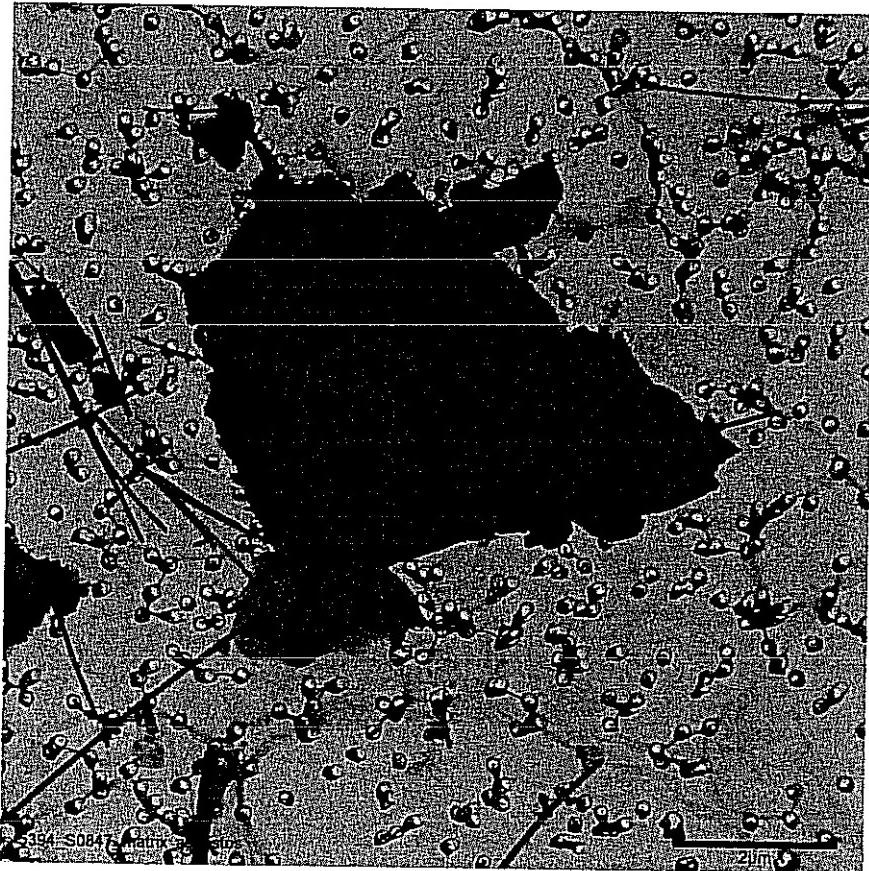
Total = 0.000 Str/CM2

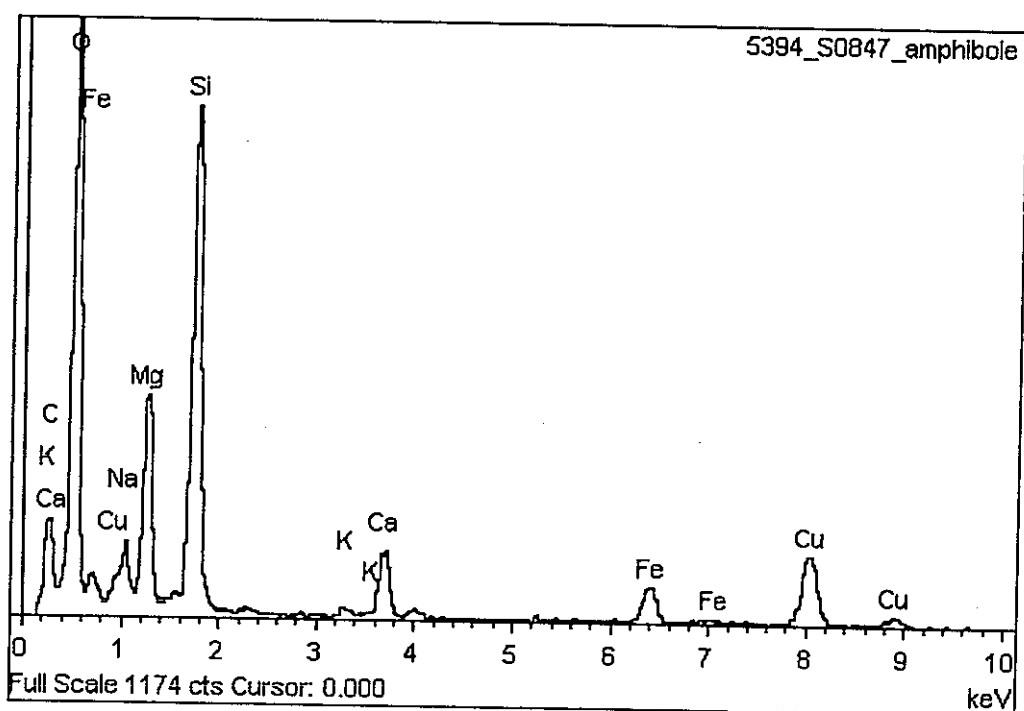
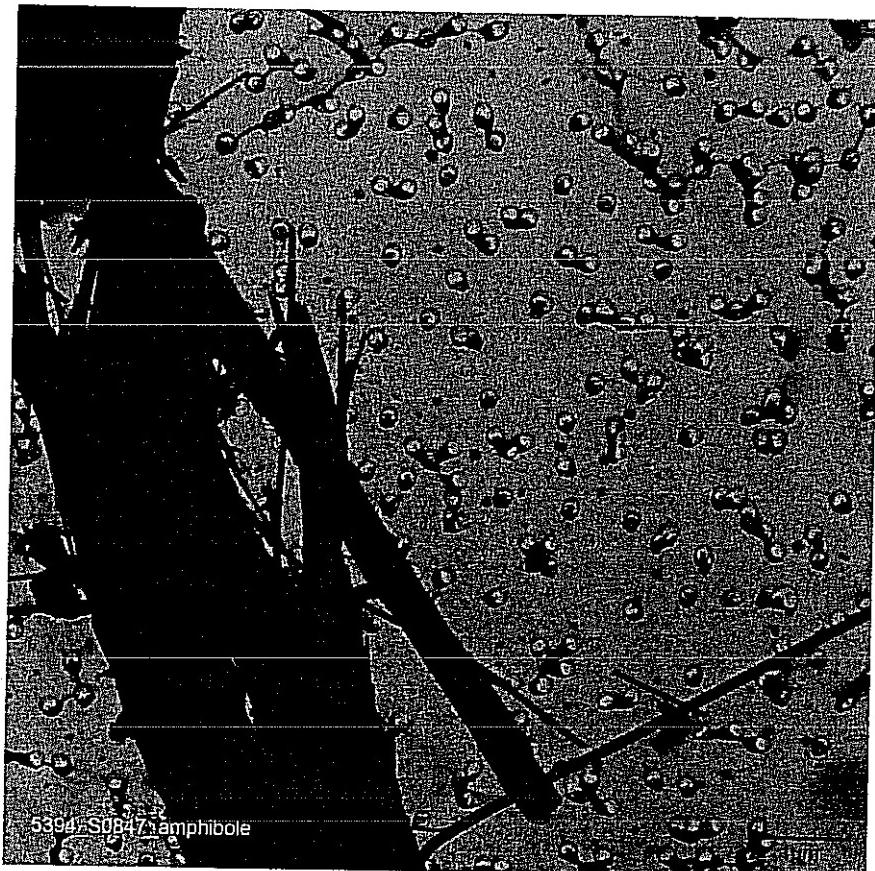
* According to ASTM D6620

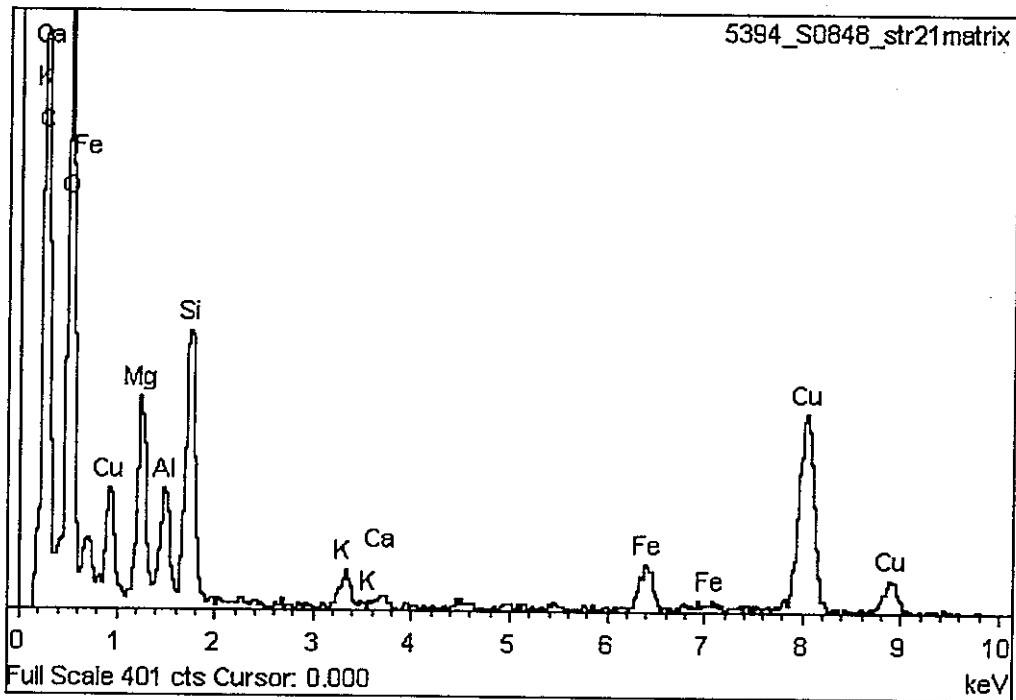
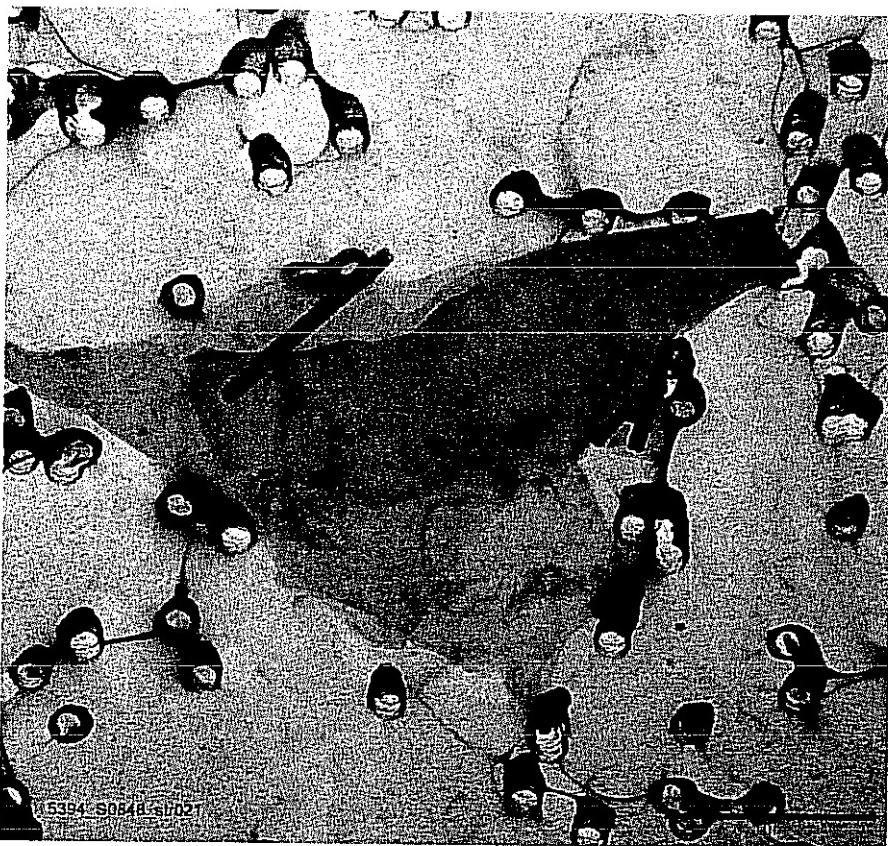
** Analytical Sensitivity Assuming 100cm^2 Sampling Area

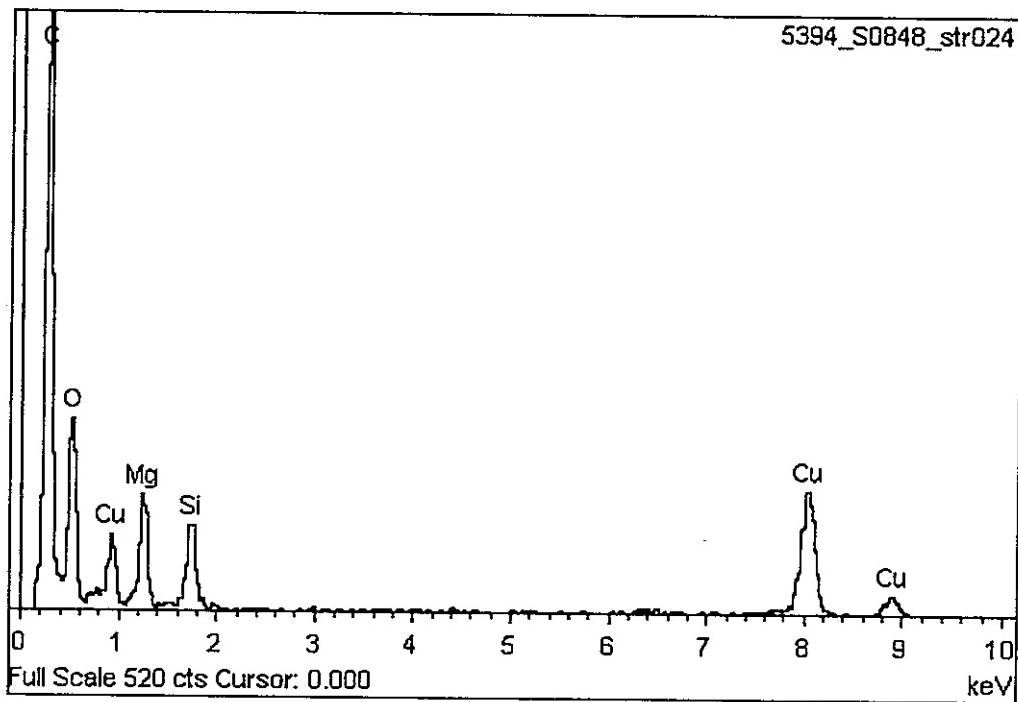
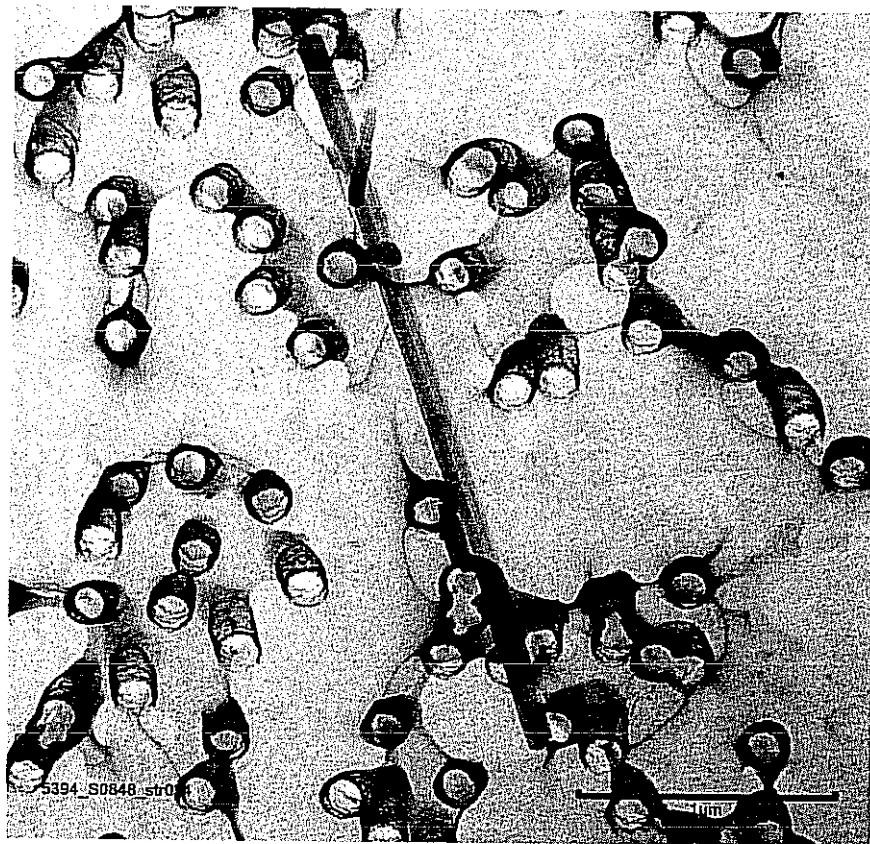


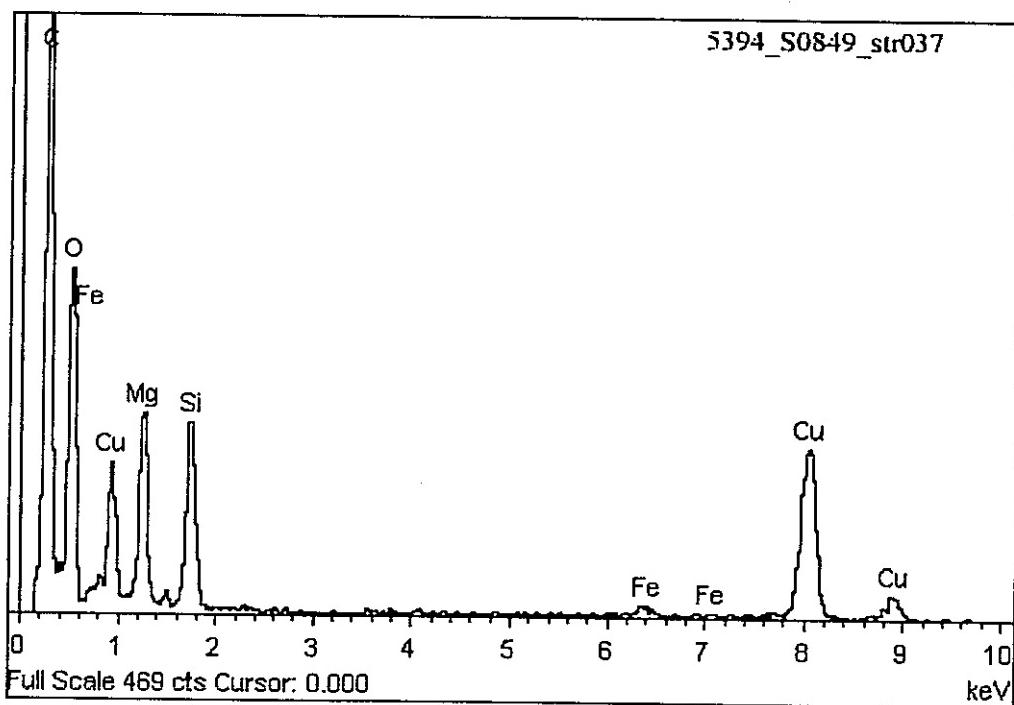


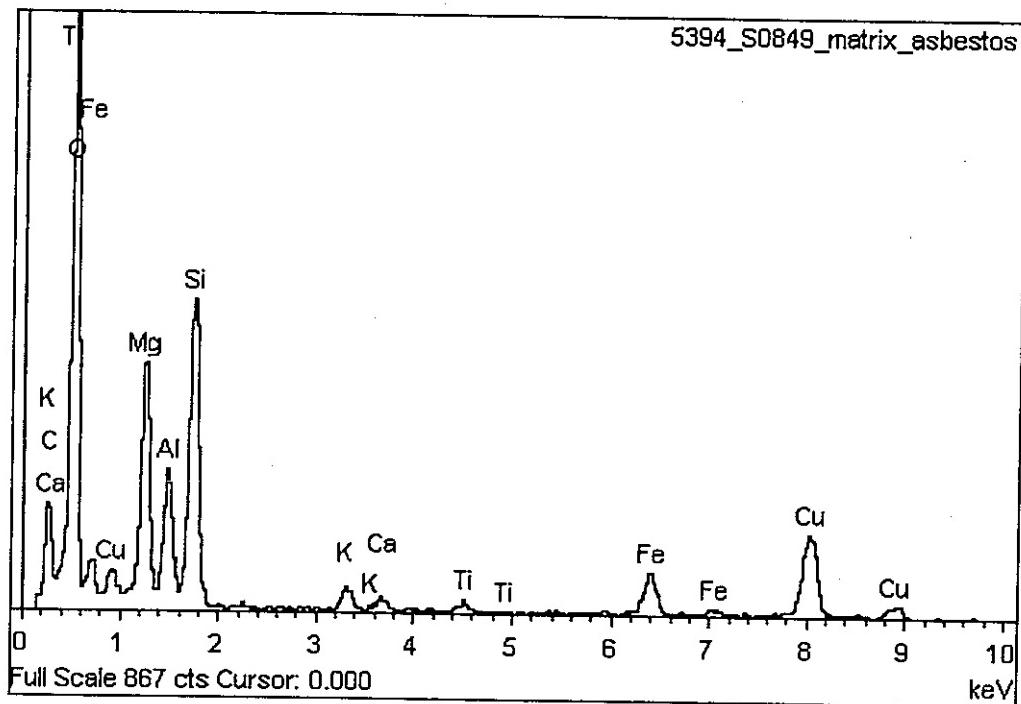
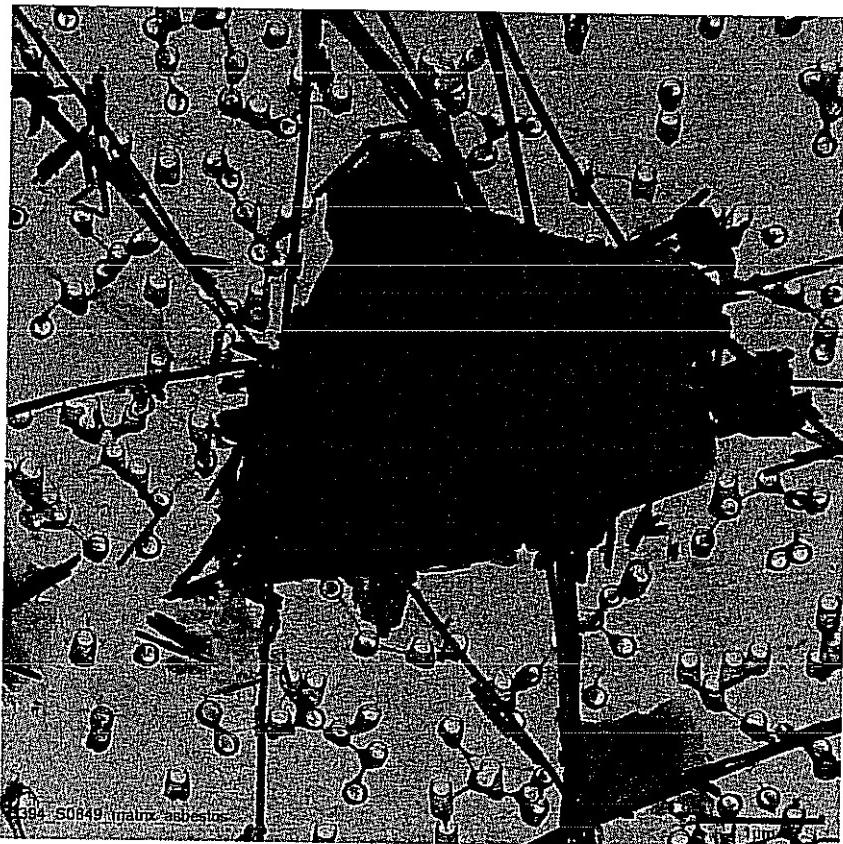


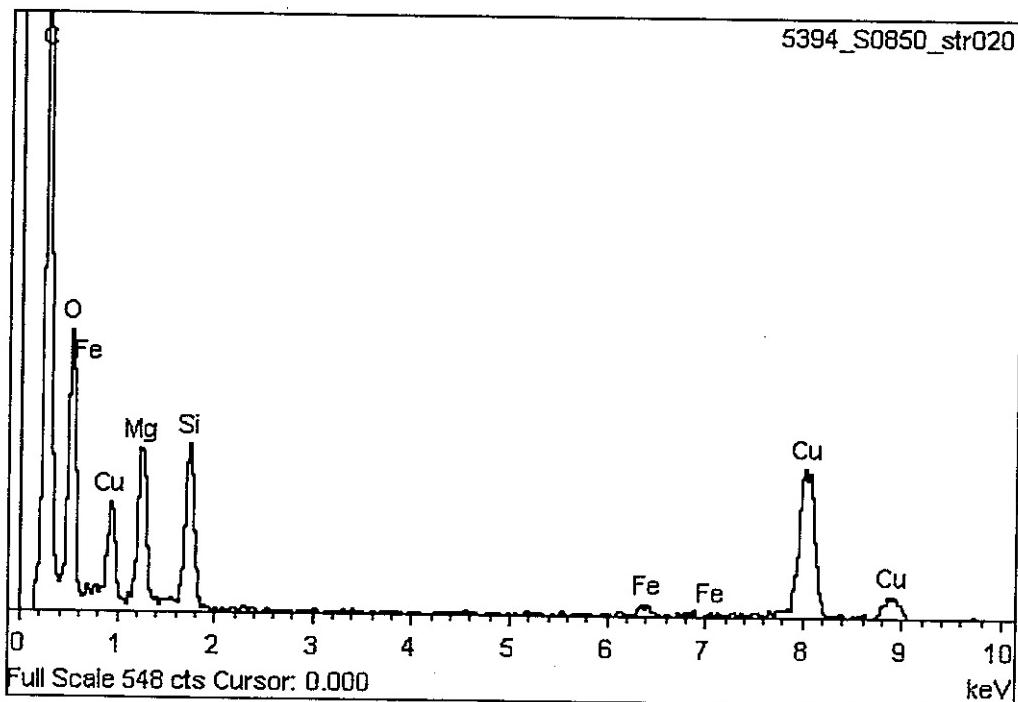
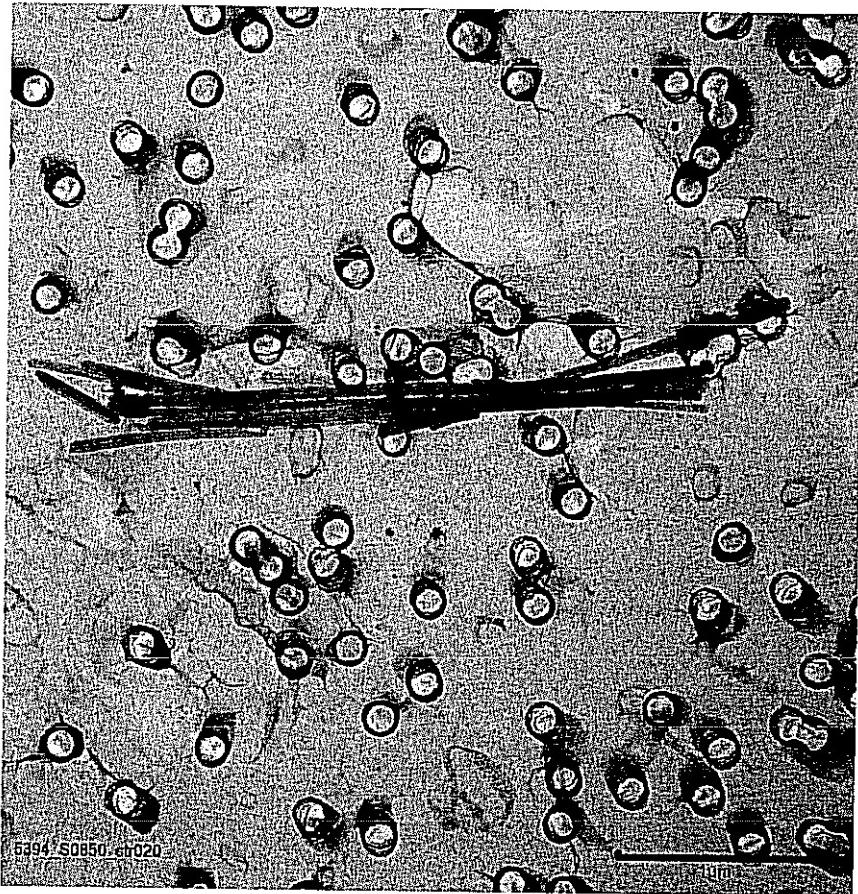


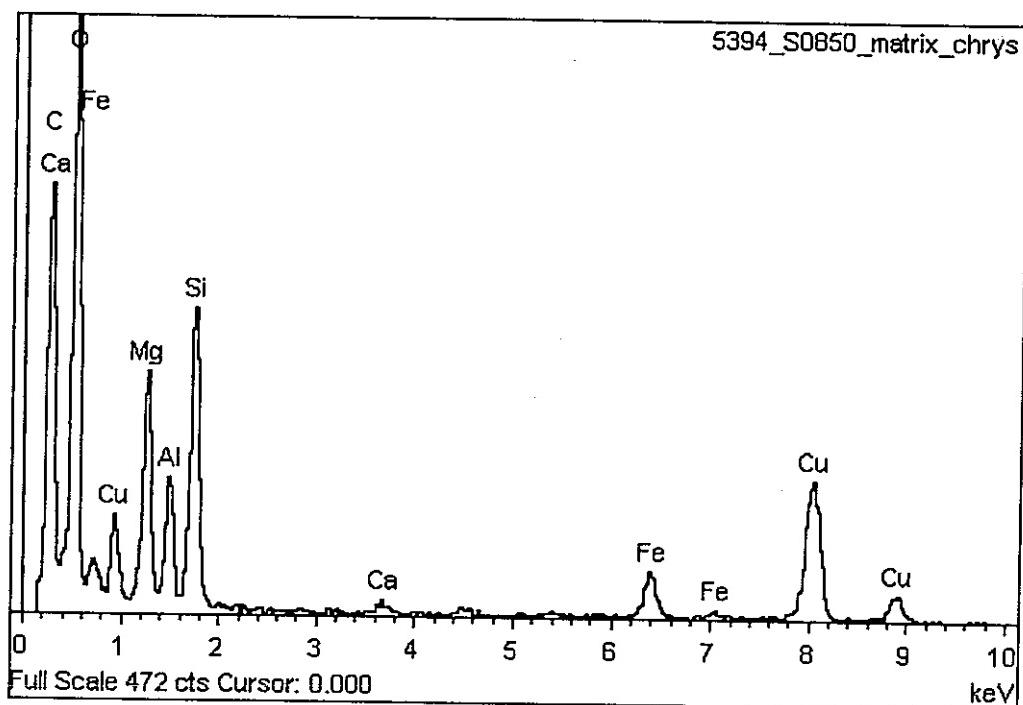
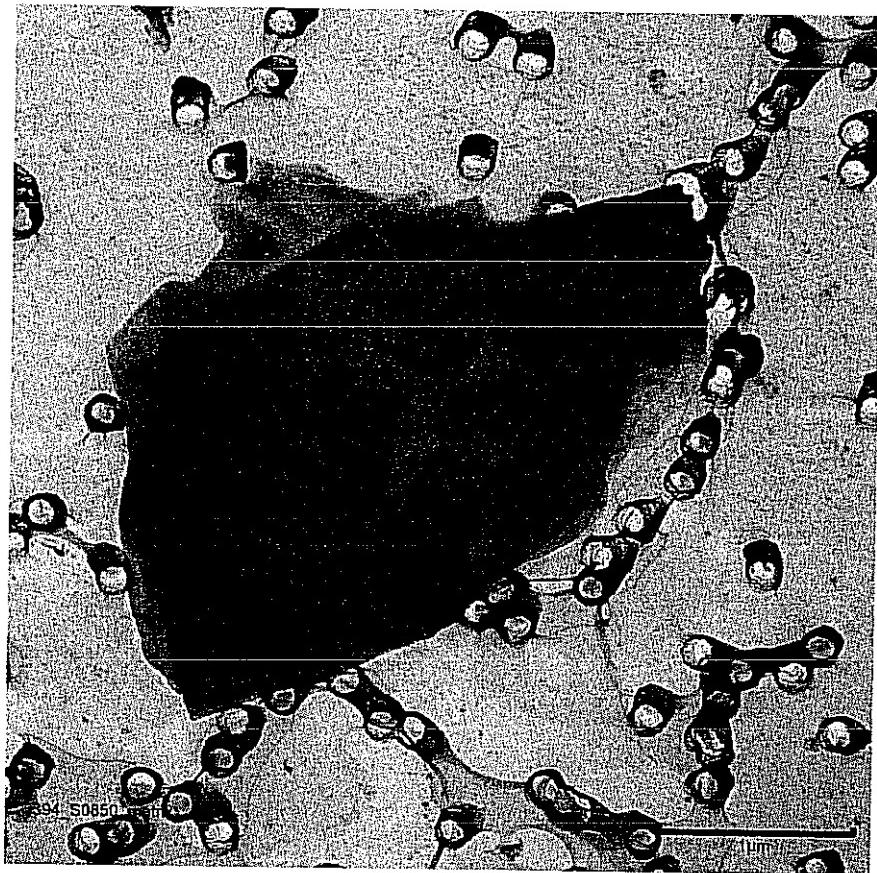


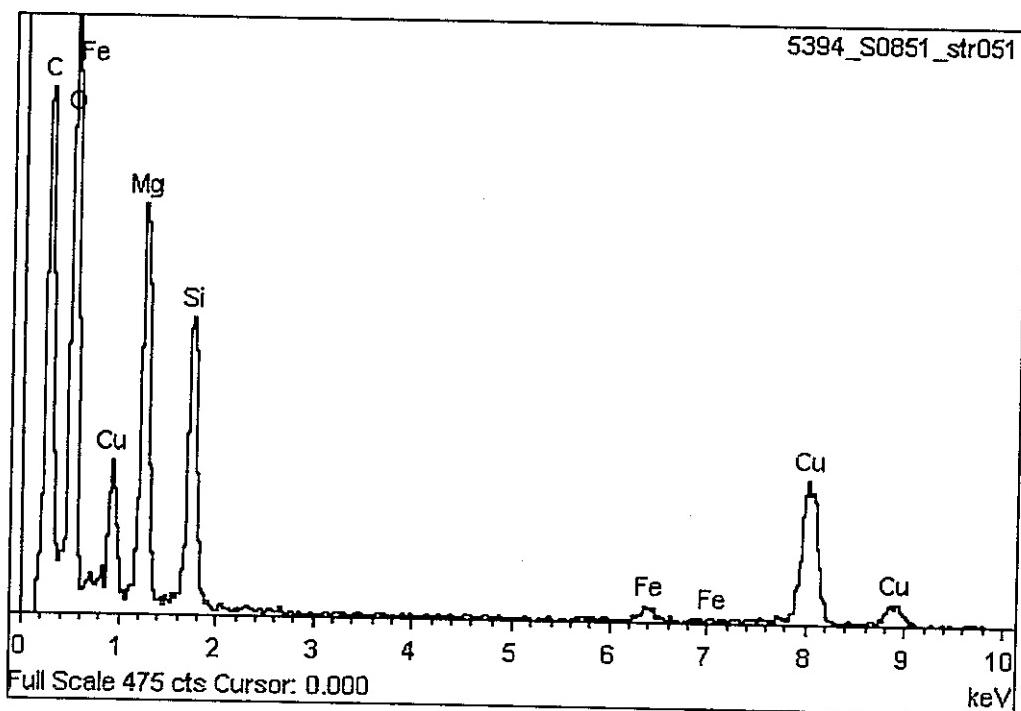
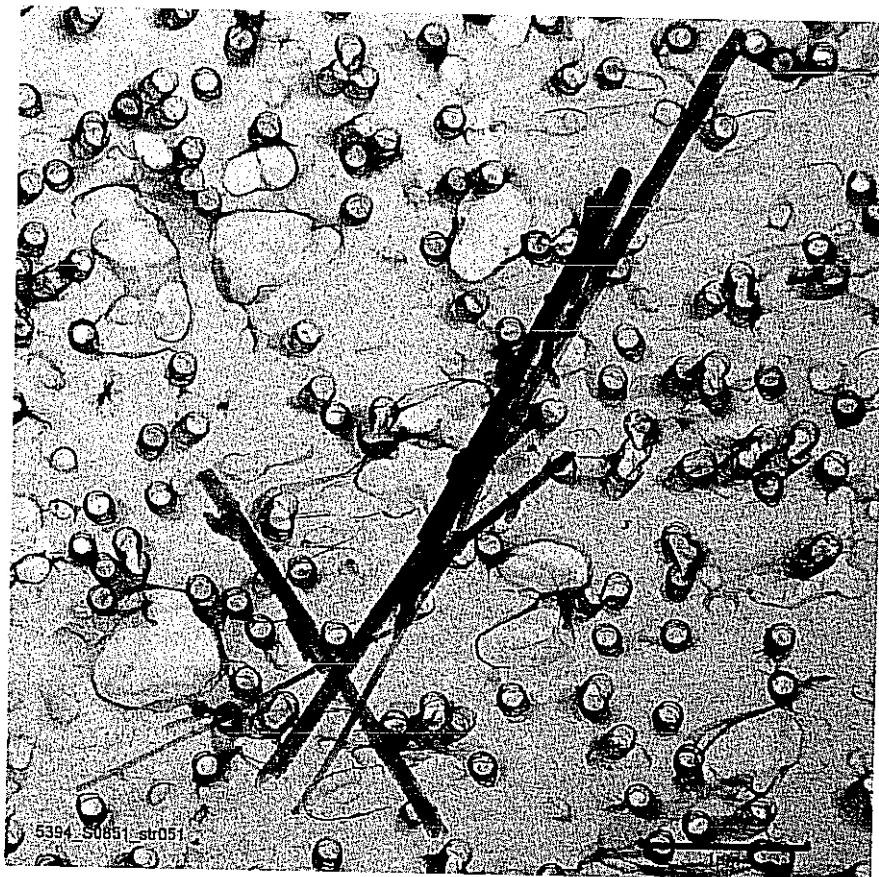


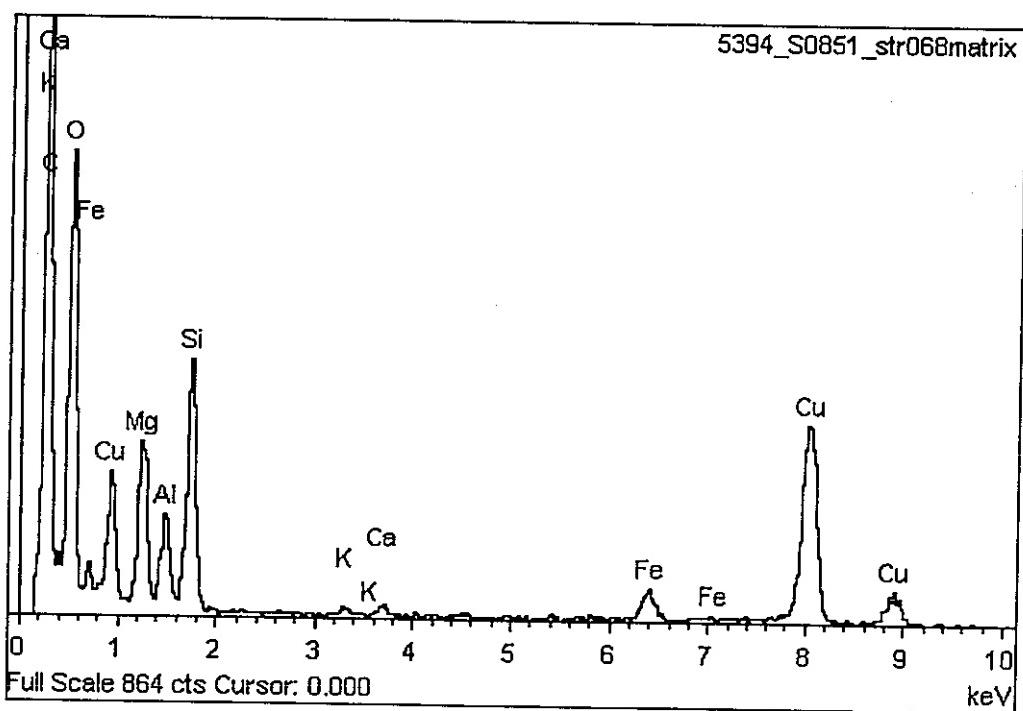
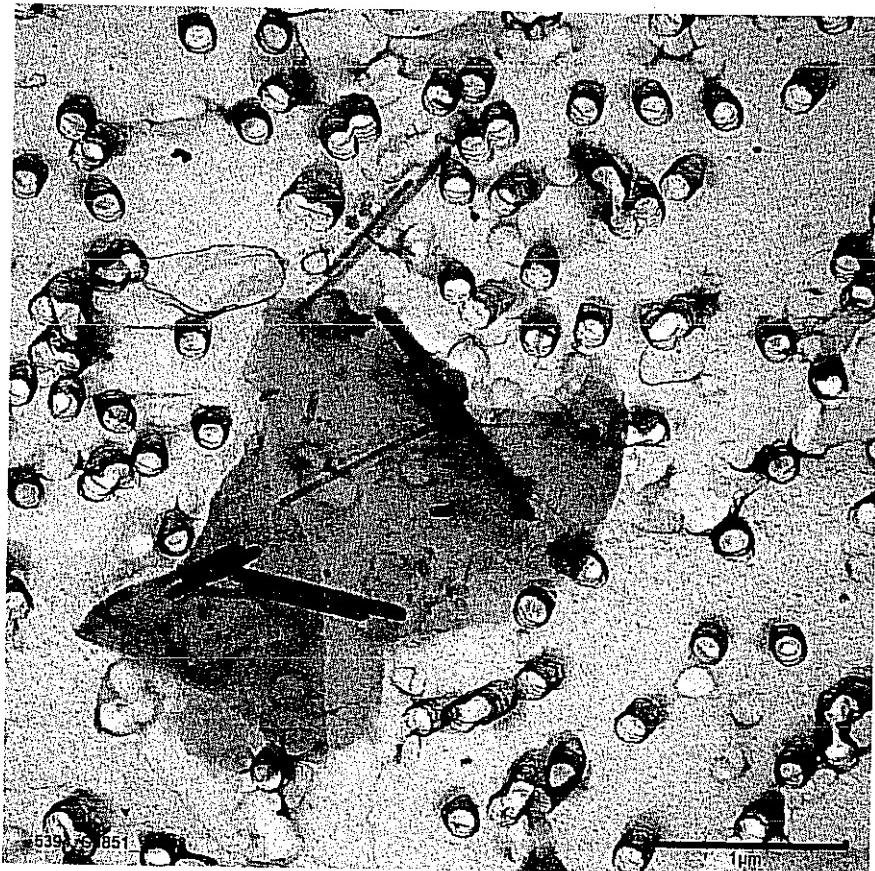












MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0847
 Client I.D.: 16.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm³): 100
 Amt Prepped(cm³): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 5
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/6/2007-8/7/2007
 Page: 1 of 2
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	B2	1	F	4.5	0.1	C			1.9	0.04
		2	F	4.0	0.1	C			1.7	0.04
		3	F	3.0	0.15	C			1.3	0.06
		4	C	2.5	1	C			1.0	0.42
		5	F	5.4	0.1	C			2.3	0.04
		6	F	1.5	0.1	C			0.6	0.04
		7	F	8.0	0.1	C			3.3	0.04
		8	F	2.5	0.1	C			1.0	0.04
		9	C	11.0	3	C	C	photo	4.6	1.25
	C5	10	B	45.5	1.9	C			19.0	0.79
		11	F	9.0	0.1	C			3.8	0.04
		12	F	4.5	0.1	C			1.9	0.04
		13	F	9.0	0.1	C			3.8	0.04
		14	F	5.4	0.1	C			2.3	0.04
		15	B	21.5	0.5	C			9.0	0.21
		16	F	2.1	0.1	C			0.9	0.04
		17	B	6.0	0.7	C			2.5	0.29
		18	F	5.0	0.1	C			2.1	0.04
		19	F	6.5	0.1	C			2.7	0.04
	D8	20	B	7.5	0.4	C			3.1	0.17
		21	F	9.0	0.1	C			3.8	0.04
		22	F	10.2	0.15	C			4.3	0.06
		23	F	7.5	0.1	C			3.1	0.04
		24	B	9.0	0.6	C			3.8	0.25
		25	F	3.2	0.1	C			1.3	0.04
		26	F	3.5	0.1	C			1.5	0.04
		27	F	6.0	0.15	C			2.5	0.06
		28	B	34.5	1	C			14.4	0.42
		29	B	6.0	0.3	C			2.5	0.13
		30	F	6.0	0.1	C			2.5	0.04
	E10	31	M	9.5	0.5	C			4.0	0.21
		32	F	5.6	0.1	C			2.3	0.04
		33	B	30.5	0.6	C			12.7	0.25
		34	F	18.0	0.1	C			7.5	0.04
		35	B	5.6	0.5	C			2.3	0.21

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

5394report082907_741P_rev1_714P_101007

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project#	5394
MVA Sample#	S0847
Client I.D.:	16.VA
Instrument:	Philips 120
Magnification:	24,000
Acc. Voltage:	100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 5
 Grid Opening (mm²): 0.009

Analyst: WH
Date: 8/6/2007-8/7/2007
Page: 2 of 2
Comments: 0.01 ml
Method: D6480
or D5755 X

*NFD or NSD = No Fibers Detected or No Structures Detected

**** On Screen Measurement**

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non-Asbestose

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0848
 Client I.D.: 17.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/7/2007
 Page: 1 of 3
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	F4	1	F	7.5	0.1	C			3.1	0.04
		2	F	3.5	0.1	C			1.5	0.04
		3	F	26.5	0.1	C			11.0	0.04
		4	M	6.0	0.1	C			2.5	0.04
		5	B	7.0	0.5	C			2.9	0.21
		6	F	13.5	0.1	C			5.6	0.04
		7	C	11.0	2	C			4.6	0.83
		8	B	2.5	0.5	C			1.0	0.21
		9	F	12.0	0.1	C			5.0	0.04
		10	C	9.5	4.5	C			4.0	1.88
		11	C	21.0	3.5	C			8.8	1.46
		12	F	3.0	0.1	C			1.3	0.04
		13	F	5.0	0.1	C			2.1	0.04
		14	F	6.5	0.1	C			2.7	0.04
		15	F	3.5	0.1	C			1.5	0.04
		16	C	29.5	2	C			12.3	0.83
		17	F	11.0	0.1	C			4.6	0.04
		18	F	5.0	0.1	C			2.1	0.04
		19	F	4.5	0.1	C			1.9	0.04
D3	20	F	2.5	0.1	C				1.0	0.04
		21	F	2.5	0.1	C	C	photo	1.0	0.04
		22	F	9.8	0.1	C			4.1	0.04
		23	B	3.5	0.5	C			1.5	0.21
		24	F	7.0	0.1	C	C	photo	2.9	0.04
		25	F	8.5	0.1	C			3.5	0.04
		26	F	35.0	0.15	C			14.6	0.06
		27	F	3.0	0.1	C			1.3	0.04
		28	F	14.5	0.1	C			6.0	0.04
		29	F	17.5	0.15	C			7.3	0.06
		30	B	32.0	0.2	C			13.3	0.08
		31	B	28.5	0.4	C			11.9	0.17
		32	B	25.0	0.3	C			10.4	0.13
		33	M	19.0	0.1	C			7.9	0.04
		34	F	4.5	0.1	C			1.9	0.04
		35	F	3.5	0.1	C			1.5	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0848
 Client I.D.: 17.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/7/2007
 Page: 2 of 3
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	D3	36	F	2.1	0.1	C			0.9	0.04
		37	M	2.1	0.2	C			0.9	0.08
	C5	38	F	8.0	0.1	C			3.3	0.04
		39	F	2.5	0.1	C			1.0	0.04
		40	F	6.5	0.1	C			2.7	0.04
		41	F	2.1	0.1	C			0.9	0.04
		42	F	4.0	0.1	C			1.7	0.04
		43	F	5.5	0.1	C			2.3	0.04
		44	F	2.2	0.1	C			0.9	0.04
		45	F	9.5	0.1	C			4.0	0.04
		46	F	5.5	0.15	C			2.3	0.06
		47	F	5.5	0.1	C			2.3	0.04
		48	C	46.5	11	C			19.4	4.58
		49	F	6.5	0.1	C			2.7	0.04
		50	M	4.0	0.1	C			1.7	0.04
		51	B	22.0	1	C			9.2	0.42
		52	F	11.5	0.2	C			4.8	0.08
		53	F	39.5	0.1	C			16.5	0.04
		54	F	2.5	0.1	C			1.0	0.04
		55	B	7.0	0.3	C			2.9	0.13
	B3	56	F	1.8	0.1	C			0.8	0.04
		57	F	9.0	0.1	C			3.8	0.04
		58	F	25.0	0.1	C			10.4	0.04
		59	F	6.0	0.1	C			2.5	0.04
		60	F	5.0	0.1	C			2.1	0.04
		61	F	1.5	0.1	C			0.6	0.04
		62	F	6.5	0.1	C			2.7	0.04
		63	F	44.5	0.1	C			18.5	0.04
		64	F	71.0	0.1	C			29.6	0.04
		65	F	6.5	0.1	C			2.7	0.04
		66	F	27.0	0.1	C			11.3	0.04
		67	B	13.0	0.5	C			5.4	0.21
		68	B	2.5	0.2	C			1.0	0.08
		69	F	11.0	0.1	C			4.6	0.04
		70	C	10.0	2.5	C			4.2	1.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
MVA Sample# S0848
Client I.D.: 17.VA
Instrument: Philips 120
Magnification: 24,000
Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
Date: 8/7/2007
Page: 3 of 3
Comments: 0.01 ml
Method: D6480
or D5755 X

*NFD or NSD = No Fibers Detected or No Structures Detected

**** On Screen Measurement**

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non-Achondrite

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0849
 Client I.D.: 18.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/7/2007
 Page: 1 of 2
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	B2	1	F	3.5	0.1	C			1.5	0.04
		2	F	8.5	0.1	C			3.5	0.04
		3	F	9.0	0.1	C			3.8	0.04
		4	F	9.5	0.1	C			4.0	0.04
		5	F	2.2	0.1	C			0.9	0.04
		6	F	9.5	0.1	C			4.0	0.04
		7	B	8.0	0.3	C			3.3	0.13
		8	F	12.0	1.5	C			5.0	0.63
		9	F	5.5	0.1	C			2.3	0.04
		10	F	5.0	0.2	C			2.1	0.08
		11	F	8.5	0.1	C			3.5	0.04
		12	B	4.5	0.4	C			1.9	0.17
		13	B	38.0	0.5	C			15.8	0.21
		14	C	9.5	6.5	C			4.0	2.71
C4	15	F	5.1	0.1	C				2.1	0.04
		16	F	5.5	0.1	C			2.3	0.04
		17	F	13.0	0.1	C			5.4	0.04
		18	C	13.0	2.1	C			5.4	0.88
		19	B	5.0	0.5	C			2.1	0.21
		20	F	3.0	0.1	C			1.3	0.04
		21	F	7.5	0.1	C			3.1	0.04
		22	F	5.6	0.1	C			2.3	0.04
		23	F	3.0	0.1	C			1.3	0.04
		24	F	5.0	0.1	C			2.1	0.04
		25	B	6.5	0.8	C			2.7	0.33
		26	F	6.0	0.1	C			2.5	0.04
		27	B	6.0	0.3	C			2.5	0.13
E7	28	F	2.0	0.1	C				0.8	0.04
		29	C	79.0	7.5	C			32.9	3.13
		30	F	2.5	0.1	C			1.0	0.04
		31	F	19.5	0.1	C			8.1	0.04
		32	F	7.0	0.1	C			2.9	0.04
		33	F	2.0	0.1	C			0.8	0.04
		34	F	3.5	0.1	C			1.5	0.04
		35	F	3.5	0.1	C			1.5	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
MVA Sample# S0849
Client I.D.: 18.VA
Instrument: Philips 120
Magnification: 24,000
Acc. Voltage: 100

Amt Collected(cm^2): 100
Amt Prepped(cm^2): 0.01
Filter Area (mm^2): 1256
Filter Type: PC
Openings Analyzed: 4
Grid Opening (mm^2): 0.009

Analyst: WH
Date: 8/7/2007
Page: 2 of 2
Comments: 0.01 ml
Method: D6480
or D5755 X

*NFD or NSD = No Fibers Detected or No Structures Detected

**** On Screen Measurement**

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, Mn = Mn²⁺, Fe = Fe²⁺

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0850
 Client I.D.: 19.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/8/2007
 Page: 1 of 3
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	C1	1	F	5.5	0.1	C			2.3	0.04
		2	F	2.0	0.1	C			0.8	0.04
		3	F	27.0	0.1	C			11.3	0.04
		4	B	25.0	0.8	C			10.4	0.33
		5	F	3.0	0.1	C			1.3	0.04
		6	B	6.5	0.2	C			2.7	0.08
		7	F	4.8	0.1	C			2.0	0.04
		8	F	1.5	0.1	C			0.6	0.04
		9	F	4.0	0.1	C			1.7	0.04
		10	B	5.0	0.3	C			2.1	0.13
		11	F	96.0	0.1	C			40.0	0.04
		12	F	2.5	0.1	C			1.0	0.04
		13	F	2.0	0.1	C			0.8	0.04
		14	F	3.5	0.1	C			1.5	0.04
		15	F	5.1	0.1	C			2.1	0.04
		16	F	3.0	0.3	C			1.3	0.13
		17	F	31.5	0.1	C			13.1	0.04
		18	C	7.0	2	C			2.9	0.83
		19	F	12.0	0.1	C			5.0	0.04
		20	B	9.0	0.4	C	C	photo	3.8	0.17
		21	F	12.5	0.1	C			5.2	0.04
		22	F	29.5	0.1	C			12.3	0.04
		23	F	2.5	0.1	C			1.0	0.04
		24	F	21.5	0.1	C			9.0	0.04
		25	F	6.0	0.1	C			2.5	0.04
		26	F	3.1	0.1	C			1.3	0.04
		27	F	2.5	0.1	C			1.0	0.04
		28	F	8.0	0.1	C			3.3	0.04
D3		29	F	40.5	0.1	C			16.9	0.04
		30	B	5.5	0.8	C			2.3	0.33
		31	B	2.5	0.5	C			1.0	0.21
		32	F	17.0	0.1	C			7.1	0.04
		33	B	7.5	0.4	C			3.1	0.17
		34	B	9.0	0.2	C			3.8	0.08
		35	F	5.5	0.1	C			2.3	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0850
 Client I.D.: 19.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/8/2007
 Page: 2 of 3
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	D3	36	F	2.2	0.1	C			0.9	0.04
		37	F	7.0	0.1	C			2.9	0.04
		38	B	57.5	0.4	C			24.0	0.17
		39	F	3.2	0.1	C			1.3	0.04
		40	F	34.0	0.1	C			14.2	0.04
		41	C	29.0	1	C			12.1	0.42
		42	B	7.0	0.8	C			2.9	0.33
		43	F	6.5	0.1	C			2.7	0.04
		44	F	2.5	0.1	C			1.0	0.04
		45	F	7.1	0.1	C			3.0	0.04
	E7	46	F	6.0	0.1	C			2.5	0.04
		47	B	7.0	0.3	C			2.9	0.13
		48	F	43.5	0.1	C			18.1	0.04
		49	B	11.5	1	C			4.8	0.42
		50	F	40.5	0.1	C			16.9	0.04
		51	F	6.5	0.1	C			2.7	0.04
		52	F	22.5	0.1	C			9.4	0.04
		53	F	36.0	0.1	C			15.0	0.04
		54	F	1.8	0.15	C			0.8	0.06
		55	F	5.4	0.1	C			2.3	0.04
		56	F	3.0	0.1	C			1.3	0.04
		57	B	4.5	0.2	C			1.9	0.08
		58	F	10.2	0.1	C			4.3	0.04
		59	F	12.5	0.1	C			5.2	0.04
		60	F	5.0	0.1	C			2.1	0.04
		61	F	2.5	0.1	C			1.0	0.04
		62	F	3.5	0.15	C			1.5	0.06
		63	F	24.5	0.1	C			10.2	0.04
		64	B	3.5	0.2	C			1.5	0.08
		65	B	6.0	0.3	C			2.5	0.13
		66	F	12.5	0.1	C			5.2	0.04
G8	67	F	14.0	0.1	C			5.8	0.04	
		68	F	10.2	0.1	C			4.3	0.04
		69	C	40.0	10	C			16.7	4.17
		70	F	3.1	0.1	C			1.3	0.04

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

Surface Dust Sample Analysis Sheet

MVA Project# 5394
MVA Sample# S0850
Client I.D.: 19.VA
Instrument: Philips 120
Magnification: 24,000
Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
Date: 8/8/2007
Page: 3 of 3
Comments: 0.01 ml
Method: D6480
or D5755 X

*NFD or NSD = No Fibers Detected or No Structures Detected

**** On Screen Measurement**

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0851
 Client I.D.: 20.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/8/2007
 Page: 1 of 4
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	C2	1	F	4.5	0.1	C			1.9	0.04
		2	F	4.6	0.1	C			1.9	0.04
		3	F	3.0	0.1	C			1.3	0.04
		4	F	2.5	0.2	C			1.0	0.08
		5	M	2.5	0.1	C			1.0	0.04
		6	F	3.2	0.1	C			1.3	0.04
		7	F	2.5	0.1	C			1.0	0.04
		8	F	1.9	0.1	C			0.8	0.04
		9	B	4.0	0.2	C			1.7	0.08
		10	B	4.6	0.5	C			1.9	0.21
		11	F	15.5	0.1	C			6.5	0.04
		12	F	2.5	0.15	C			1.0	0.06
		13	F	15.5	0.2	C			6.5	0.08
		14	B	3.5	0.5	C			1.5	0.21
		15	B	8.5	0.6	C			3.5	0.25
		16	F	30.0	0.1	C			12.5	0.04
		17	B	9.0	0.5	C			3.8	0.21
		18	F	10.0	0.1	C			4.2	0.04
		19	F	8.5	0.1	C			3.5	0.04
		20	B	6.5	0.3	C			2.7	0.13
		21	F	21.5	0.1	C			9.0	0.04
		22	F	20.0	0.1	C			8.3	0.04
		23	C	5.4	1.6	C			2.3	0.67
		24	F	6.5	0.2	C			2.7	0.08
		25	F	12.0	0.1	C			5.0	0.04
		26	F	31.5	0.1	C			13.1	0.04
		27	F	2.5	0.1	C			1.0	0.04
E4		28	F	8.0	0.1	C			3.3	0.04
		29	B	10.5	0.4	C			4.4	0.17
		30	F	4.5	0.1	C			1.9	0.04
		31	F	8.0	0.1	C			3.3	0.04
		32	F	5.5	0.1	C			2.3	0.04
		33	B	3.0	0.2	C			1.3	0.08
		34	F	27.0	0.1	C			11.3	0.04
		35	B	6.0	1	C			2.5	0.42

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0851
 Client I.D.: 20.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/8/2007
 Page: 2 of 4
 Comments: 0.01 ml
 ASTM Method: D6480
or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	E4	36	C	17	8.5	C			7.1	3.54
		37	F	6.0	0.1	C			2.5	0.04
		38	M	1.5	0.1	C			0.6	0.04
		39	F	32.5	0.1	C			13.5	0.04
		40	F	11.0	0.1	C			4.6	0.04
		41	M	3.5	0.1	C			1.5	0.04
		42	F	3.0	0.1	C			1.3	0.04
		43	F	6.0	0.1	C			2.5	0.04
		44	F	29.0	0.1	C			12.1	0.04
		45	F	5.5	0.1	C			2.3	0.04
		46	F	13.0	0.1	C			5.4	0.04
		47	B	6.0	0.4	C			2.5	0.17
		48	F	12.0	0.1	C			5.0	0.04
		49	F	9.5	0.1	C			4.0	0.04
		50	F	32.5	0.1	C			13.5	0.04
		51	C	12.5	6	C	C	photo	5.2	2.50
		52	F	2.5	0.1	C			1.0	0.04
		53	F	2.6	0.1	C			1.1	0.04
		54	F	10.0	0.15	C			4.2	0.06
		55	F	21.0	0.1	C			8.8	0.04
		56	B	5.0	0.8	C			2.1	0.33
		57	F	14.0	0.1	C			5.8	0.04
		58	F	10.0	0.1	C			4.2	0.04
		59	F	5.6	0.1	C			2.3	0.04
		60	C	19.5	2.5	C			8.1	1.04
		61	F	9.5	0.15	C			4.0	0.06
G5	62	F	6.0	0.15	C				2.5	0.06
		63	F	18.0	0.1	C			7.5	0.04
		64	F	1.5	0.1	C			0.6	0.04
		65	F	1.0	0.1	C			0.4	0.04
		66	B	4.5	0.2	C			1.9	0.08
		67	F	10.5	0.1	C			4.4	0.04
		68	M	2.0	0.1	C	C	photo	0.8	0.04
		69	F	5.0	0.1	C			2.1	0.04
		70	C	5.5	1.5	C			2.3	0.63

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

Surface Dust Sample Analysis Sheet

MVA Project# 5394
 MVA Sample# S0851
 Client I.D.: 20.VA
 Instrument: Philips 120
 Magnification: 24,000
 Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
 Date: 8/8/2007
 Page: 3 of 4
 Comments: 0.01 ml
 ASTM Method: D6480
 or D5755 X

Grid	Opening	Structure Number*	Structure Type	Length** (cm)	Width** (cm)	SAED	EDS	Comments	Length*** (μm)	Width*** (μm)
1	G5	71	B	6	0.3	C			2.5	0.13
		72	C	23.5	2	C			9.8	0.83
		73	M	7.5	0.1	C			3.1	0.04
		74	F	6.0	0.15	C			2.5	0.06
		75	F	18.0	0.1	C			7.5	0.04
		76	F	11.0	0.1	C			4.6	0.04
		77	F	7.5	0.1	C			3.1	0.04
		78	F	3.5	0.1	C			1.5	0.04
		79	F	2.5	0.15	C			1.0	0.06
		80	F	3.0	0.1	C			1.3	0.04
		81	F	12.0	0.1	C			5.0	0.04
		82	F	13.0	0.1	C			5.4	0.04
		83	F	13.0	0.1	C			5.4	0.04
		84	F	2.0	0.1	C			0.8	0.04
		85	F	5.5	0.1	C			2.3	0.04
		86	F	3.0	0.1	C			1.3	0.04
		87	F	2.0	0.1	C			0.8	0.04
		88	F	17.5	0.1	C			7.3	0.04
		89	F	22.0	0.1	C			9.2	0.04
		90	F	3.0	0.1	C			1.3	0.04
I1	91	F	3.5	0.1	C				1.5	0.04
	92	F	4.0	0.1	C				1.7	0.04
	93	F	23.0	0.1	C				9.6	0.04
	94	F	9.5	0.1	C				4.0	0.04
	95	F	6.0	0.1	C				2.5	0.04
	96	F	17.0	0.1	C				7.1	0.04
	97	F	4.6	0.1	C				1.9	0.04
	98	F	20.1	0.1	C				8.4	0.04
	99	F	10.0	0.1	C				4.2	0.04
	100	F	5.5	0.1	C				2.3	0.04
	101	F	7.5	0.1	C				3.1	0.04
	102	M	1.5	0.1	C				0.6	0.04
	103	C	6.0	0.7	C				2.5	0.29
	104	F	8.0	0.1	C				3.3	0.04
	105	C	52.5	7.5	C				21.9	3.13

*NFD or NSD = No Fibers Detected or No Structures Detected

** On Screen Measurement

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

MVA SCIENTIFIC CONSULTANTS

Surface Dust Sample Analysis Sheet

MVA Project# 5394
MVA Sample# S0851
Client I.D.: 20.VA
Instrument: Philips 120
Magnification: 24,000
Acc. Voltage: 100

Amt Collected(cm²): 100
 Amt Prepped(cm²): 0.01
 Filter Area (mm²): 1256
 Filter Type: PC
 Openings Analyzed: 4
 Grid Opening (mm²): 0.009

Analyst: WH
Date: 8/8/2007
Page: 4 of 4
Comments: 0.01 ml
Method: D6480
or D5755 X

*NFD or NSD = No Fibers Detected or No Structures Detected

**** On Screen Measurement**

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Mixed

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AF = Anthophyllite

Surface Dust Sample Analysis Sheet

MVA Project# 5394
MVA Sample# S0852
Client I.D.: 21.VA
Instrument: Philips 120
Magnification: 24,000
Acc. Voltage: 100

Amt Collected(cm²): 0
Amt Prepped(cm²): N/A
Filter Area (mm²): 1256
Filter Type: PC
Openings Analyzed: 10
Grid Opening (mm²): 0.009

Analyst: WH
Date: 8/8/2007
Page: 1 of 1
Comments: 10 ml
Method: D6480
or D5755 X

*NFD or NSD = No Fibers Detected or No Structures Detected

**** On Screen Measurement**

*** Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fibers, M = Multi

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Anthophyllite